

## ELECTRONICS TECHNICIAN

### DEFINITION

To perform a variety of routine skilled work in the installation, maintenance and repair of mobile and portable two-way radios and other electronic equipment utilized by the Police, Fire, Data Processing, and other City departments; and to perform related work as assigned.

### SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from an assigned supervisor.

May exercise technical and functional guidance over less experience staff.

ESSENTIAL FUNCTIONS – Functions may include, but are not limited to, the following:

Analyzes, diagnoses and repairs a variety of electronic equipment such as radios, intercom systems, recording systems, public address systems, transcribing machines, calculators, security and alarm systems, closed circuit TV systems, and traffic radar units using various testing meters and devices.

Install, assembles and tests fixed and mobile radio transmitters and receivers; tests circuits, tubes and allied parts; isolates defects in electronic equipment in order to meet specifications and their effective operation.

Conduct field tests on equipment to determine the cause of interruptions or interference; operates and monitors communication equipment; prepares design specifications and estimates costs.

Prepare equipment replacement schedules and designates obsolete or worn out units; makes and records measurements required by FCC rules and regulations; requisitions equipment, parts, tools and materials.

Assist in the instruction and training of less experienced staff.

Keep work related records using a computer.

Operate City vehicles skillfully and safely.

Respond to questions or complaints from the public.

Build and maintain positive working relationships with co-workers, other City employees and the public using principles of good customer services.

Perform other related duties as assigned.

MINIMUM QUALIFICATIONS

Knowledge of:

Radio, communications and electronic methods, materials, tools equipment and theory.

Test equipment and techniques.

Pertinent rules, laws, and policies related to area of assignment.

Safe work methods and safety regulations pertaining to the work.

Computer equipment and software applications related to assignment.

English usage, spelling, grammar, and punctuation.

Ability to:

Read electronic schematics drawings.

Perform electronic inspection, maintenance and installation of communications equipment and allied electronic projects.

Use and operate tools and equipment related to assignment, including personal protective equipment.

Keep work related records and prepare reports using a computer.

Work effectively at remote locations without direct supervision.

Operate City vehicles observing legal and defensive driving practices.

Follow oral instruction; read, interpret, follow and explain written instructions, construction sketches and equipment manuals.

Use initiative and sound independent judgment within established guidelines.

Communicate clearly and concisely, both orally and in writing.

Work overtime and off-hours shifts when necessary or directed.

In the absence of a supervisor, assume responsibilities as needed.

Establish and maintain effective working relationships with those contacted in the course of work.

Work with various cultural and ethnic groups in a tactful and effective manner.

#### Experience and Training

Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

##### Experience:

Two years of responsible experience involving communications, radios and electronics.

##### Training:

Equivalent to the completion of the twelfth grade supplemented by courses in communications and electronic theory or a related field.

#### License or Certificate

Possession of a valid California driver's license.

Possession of a valid FCC, NABER or CET Certification is highly desirable.

#### PHYSICAL DEMANDS

On a continuous basis, sit at a desk and/or stand, walk for varying periods while performing duties. Crawl, bend, stoop, reach, grab, pull, push, manipulate, operate, lift and carry objects, tools and materials or equipment for shop or site repairs. Intermittently twist and reach for tool or equipment; write and use keyboard to communicate through written means; lift or carry weight of 75 pounds or less. Visual ability sufficient to operate equipment, tools, vehicles under daylight and evening conditions; to read schematic drawings instructions, write reports, logs and schedules. Verbal ability to communicate effectively with other individuals and to listen to radio or telephone conversations.

#### WORK ENVIRONMENT:

Work is performed both indoors and outdoors. Some work is performed with exposure to low to loud noise levels; frequent fieldwork is required with exposure to a variety of weather conditions with exposure to the external environments; tasks may require working in tightly enclosed spaces and the use of ladders or other safety equipment to gain access to hard to reach locations; some work is performed in crawl spaces, attics or on rooftops. Some work may require exposure to unpleasant and potentially hazardous substances and high voltage.

4/03